

### **REMARKS/ARGUMENTS**

Claims 7-29 are pending. Claims 7, 8 and 19 have been amended for clarity. The specification has been amended by adding descriptions for figures 1-6 in the brief description of the drawings. Support for the amendment can be found on the title of each drawing which was included in the application as filed. The specification was also amended to add within the description of figure 7, a description of item 30 as being an optional label. Support for the description of item 30 within the description of figure 7 can be found in the specification at page 5, line 8. Within the description of figure 8, there is a similar description also depicting the removal of non-hybridized probes and an optional label (item 30) which is shown in the same fashion as in Figure 7 and labeled as item 30.

The claim and specification amendments are presented in a revised format per the USPTO's announcement 'Amendments in a Revised Format Now Permitted', signed 31 January 2002, and accordingly do not conform to the current reading of 37 C.F.R. §1.121, which Applicants understand has been waived. Accordingly, a complete listing of all claims that are, or were in the application, along with an appropriate status identifier, is provided above in the section entitled "Amendments to the Claims". The amendments to the specification is provided above in the section entitled "Amendments to the Specification".

### **ELECTION OF SPECIES**

In response to the first Species Election Requirement, Applicants confirm the election of species (1), namely a primary label on a primer. With regard to the second Species Election Requirement, Applicants confirm the election of species (3), namely a primary label on dNTPs.

In compliance with the Examiner's request regarding the species election, Applicants submit that claims 7-22 and 25-29 read on the elected species of the first election. Claims 7-27 read on the elected species of the second election. Claims 13-14, 23-24 and 28-29 are being withdrawn from further consideration as being drawn to the non-elected invention. However, Applicants understand that any elections of species are being made solely to facilitate the examination of the claims, and that he is entitled to consideration of additional species upon an indication that a generic claim is allowable.

#### **Information Disclosure Statement**

The Examiner states that an IDS could not be located and only the PTO-1449 could be found with the instant application. The Examiner noted that the Applicants filed an IDS on June 11, 2002 for which the IDS could not be located. The Applicants submitted an IDS on June 6, 2001 and another IDS was submitted on August 16, 2002, both of which are being enclosed with this response. The PTO-1449 submitted on August 16, 2002 was received by the PTO on August 19, 2002 and signed by Examiner Lu on December 9, 2002, a copy of which is also being enclosed with this response. Applicants respectfully request that the Examiner sign as considered the PTO-1449 form submitted on June 6, 2001.

#### **Specification**

The disclosure is objected to because of the following informalities:

- 1) There is no description for figures 1-6.

In response, Applicants submit that the specification has been amended as stated above in the Remarks to include descriptions of figures 1-6.

2) Although there is an item 30 in Figure 7, there is no description of item 30 in the Brief Description of the Drawing 7.

Applicants note that the specification has been amended as stated in the Remarks to include within the description of figure 7, a description of item 30. Applicants respectfully request the withdrawal of the objection.

### **Claim Objections**

Claim 7 is objected to because the Examiner stated that the phrase “to second adjacent target domain” should be added before the word “wherein” in step b). Applicants have made the amendment suggested by the Examiner and respectfully request the withdrawal of the objection.

In addition, claim 7 has been amended by inserting the term “adjacent” to the phrase “to said second target domain”, which now reads: “to said second adjacent target domain”. This amendment was made to give proper antecedent basis. Applicants respectfully request the withdrawal of the objection.

### **Claim rejections under 35 U.S.C§ 112, second paragraph**

Claims 7-12, 15-22, and 25-27 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claim 7 is rejected as vague and indefinite in view of the phrase “wherein at least one of said first and second probes comprises at least a first adapter sequence, said poly(A) sequence remains single stranded, and said target sequence and said first and second probes form a ligation complex” in step b) because the Examiner states that it is unclear, in which situation, said poly

(A) sequence remains single-stranded since poly (A) sequence of a first target sequence can be single stranded before or after the first target sequence hybridizes to a first and a second probes. Applicants respectfully traverse.

As noted in the claims a target sequence with single stranded poly(A) sequence is hybridized with first and second probes wherein the poly(A) sequence remains single stranded. Thus, following hybridization of the probes and the target, e.g. in the context of the ligation complex as set forth in the claims, the poly(A) sequence remains single stranded. The poly(A) sequence hybridizes with the poly(T) sequence on the support. Accordingly, Applicants submit that the claims clearly define that which is claimed. Applicants respectfully request the withdrawal of the rejection.

Claim 7 is rejected as vague and indefinite because the goal of the claim (see preamble) does not correspond to its method steps. Applicants respectfully traverse.

The preamble of claim 7 recites a method of detecting a first target sequence comprising a first target domain, a second adjacent target domain and a single stranded poly(A) sequence. By detecting the assay complex, which includes a sequence complementary to the target, the preamble does in fact reflect the goal of the entire claim which is a method of detecting a first target sequence. Detecting the presence or absence of the assay complex is an indication of the presence or absence of the target sequence. Accordingly, the rejection is improper. Applicants respectfully request the withdrawal of the rejection.

Claim 8 is rejected as vague and indefinite because it is unclear what is meant by “directly adjacent”. Applicants respectfully traverse. Support for the term “directly adjacent” is found in the specification at page 14, lines 19-22. Directly adjacent is where the first and second target domains have no intervening nucleotides, as opposed to “indirectly adjacent” where the

first and second target domains are separated by intervening nucleotides and a system of polymerase and dNTPs are used to fill the gap prior to ligation of complementary probes.

Applicants respectfully request the withdrawal of the rejection.

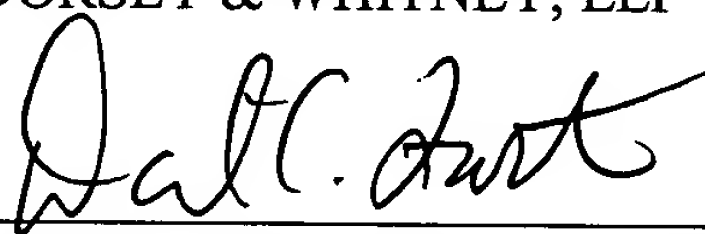
Claim 19 is rejected as vague and indefinite because it is unclear what is meant by “ a poly(T) sequence comprises magnetic beads”. In response, Applicants have amended claim 19 to read “A method according to claim 7, 8 or 9 wherein said support comprises magnetic beads comprising a poly(T) sequence”. Support for the amendment can be found in the specification at page 19, lines 3-4. Applicants respectfully request the withdrawal of the rejection.

**CONCLUSION**

Applicants respectfully submit that the claims are now in condition for allowance and early notification to that effect is respectfully requested. If the Examiner feels there are further unresolved issues, the Examiner is respectfully requested to phone the undersigned at (415) 781-1989.

Respectfully submitted,

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Filed under 37 C.F.R. § 1.34(a)

Dated: 4/16/2003

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